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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/617,250	07/11/2003	Mark Irvine Tucker	P69021US0	2432	
136 75	590 06/20/2006		EXAM	EXAMINER	
JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W.			AYRES, TIMOT	'HY MICHAEL	
SUITE 600	TOTAL TANK		ART UNIT	PAPER NUMBER	
WASHINGTO	N, DC 20004		3637		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/617,250	TUCKER, MARK IRVINE			
		Examiner	Art Unit			
		Timothy M. Ayres	3637			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
WHIC - Exter after - If NO - Failui Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE is not soft time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. mely filed  the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>23 September 2005</u> .					
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Dispositi	on of Claims		•			
5)□ 6)⊠ 7)□	Claim(s) <u>1-45</u> is/are pending in the application.  4a) Of the above claim(s) <u>15-25</u> is/are withdraw Claim(s) is/are allowed.  Claim(s) <u>1-14 and 26-45</u> is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	n from consideration.				
Applicati	on Papers					
10)⊠	The specification is objected to by the Examiner The drawing(s) filed on 11 July 2003 is/are: a) Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correcti The oath or declaration is objected to by the Ex-	☐ accepted or b) ☐ objected to drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).			
Priority u	nder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
2) Notice 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal I 6)  Other:				

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### **DETAILED ACTION**

## Election/Restrictions

1. Applicant's election without traverse of group 1, claims 1-14 and 26-45 in the reply filed on 9/23/05 is acknowledged.

## **Priority**

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## **Drawings**

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the non planar surface, plurality of upstands that are prismatic, and the cobbled surface must be shown or the feature(s) canceled from the claim(s). Figures 8 and 9 do not provide enough detail and are unclear as to what is being shown. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

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and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 5. Claims 6-9, 11, 12, 30, 31, 37, 42, and 43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear as to how to make a non-planar surface that is textured with a pattern of upstands that are cobbled or prismatic in a layer of gypsum.
- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 26-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Rgearding claim 26, the "a compressible material spacer element" in line 8 is different than the "a compressible material spacer element" recited in line 11 and therefore should have a different name to help differentiate which one is being referred to in later claims such as 32.

# Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 10. Claims 26, 27, 32, 33, 35, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by PCT Publication WO 98/03745 to Duvenhill. Duvenhill teaches a wall structure comprising vertical extending framework that includes two parallel and sperated rows of timber studs (7,8). A first wall panel subassembly that includes a first panel (15) separated and connected by a compressible material spacer element (14) with a second panel (13). Another compressible material spacer element (6) is provided intermediately between the first panel subassembly and to the first row of studs (8). A second panel subassembly including a first panel (11), a compressible material spacer

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element (12), and a second panel (10) is attached to the second row of studs (7). The compressible material spacer element (14) is strips of wood boards. The examiner considers wood to have a degree of compressibility to meet this limitation in the claims. The another compressible material spacer element (6) is cardboard that also has a degree of compressibility to meet this limitation in the claims.

# Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 13. Claims 1-5, 10, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 3,908,062 to Roberts in view of US Patent 4,330,589 to Saito and US Patent 5,955,187 to McCormack. Roberts teaches a wall panel made of 3 layers. The first layer (20) and third layers (19) are made of homogenous gypsum material. The second layer (18) is made from mineral fiberboard. The panel is

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sandwiched in paper layers (22,21). Roberts does not expressly disclose the second layer made of gypsum material having a plurality of cavities and the cavities containing an anhydrate material. Saito teaches a gypsum based material (1) with cavities (2) formed therein. At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the wall panel of Roberts by replacing the second layer with the panel taught by Saito to absorb sound better.

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- 14. Roberts in view of Saito does not expressly disclose an anhydrate material in the cavities. McCormack teaches a sheet material with cavities (14) filled with an anhydrate material (16). McCormack does not specifically say what the anhydrate material (16) is, but gives a list of categories that could be selected to perform the function. Potassium polyacylate would be included in the categories. At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the wall panel of Roberts in view of Saito by adding an anhydrate material to the cavities in the second layer as taught by McCormack to absorb and prevent the transfer of water.
- 15. The claim is a product by process claim. The product itself does not depend on the process of making it. The product-by-process limitation "cavities formed by volumetric shrinking of said anhydrate material" would not be expected to impart distinctive structural characteristics to the device/apparatus other than cavities with an anhydrate material in them.
- 16. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 3,908,062 to Roberts in view of US Patent 4,330,589 to Saito and US Patent

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5,955,187 to McCormack as applied to claims 1-5, 10, 13, and 14 above, and further in view of US Patent 2,248,233 to Heritage. Roberts in view of Saito and McCormack discloses every element as claimed and discussed above except a patterned non planar surface consisting of a plurality of prismatic upstands or cobbled surface. Heritage teaches a wallboard panel with a textured surface that is either wavy pattern as seen in figure 1 and 5 or in a waffle board pattern in figure 2. These patterns are given as examples and the pattern can be in any form for decorative features. At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the panel of Roberts in view of Saito and McCormack by using a patterned surface as taught by Heritage for aesthetic reasons and to help prevent warping.

17. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 3,908,062 to Roberts in view of US Patent 4,330,589 to Saito, US Patent 5,955,187 to McCormack, and US Patent 2,248,233 to Heritage as applied to claims 6-9 above, and further in view of US Patent Publication 2002/0155282 to Randall. Roberts in view of Saito, McCormack, and Heritage, disclose every element as claimed and discussed above except the first and third layers including an EVA additive and fiber re-enforcing material. Randall teaches a gypsum board with fiber re-enforcing (14,16) added to the outside of the gypsum board. An EVA additive is used with the gypsum (Page 6, Paragraph 49). At the time of the invention it would have been obvious to modify the panel of Roberts in view of Saito, McCormack, and Heritage by adding a

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fiber re-enforcing material and EVA additive as taught by Randall to protect the gypsum against prolonged moisture.

- 18. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication WO 98/03745 to Duvenhill in view of US Patent 3,908,062 to Roberts in view of US Patent 4,330,589 to Saito and US Patent 5,955,187 to McCormack. Duvenhill discloses every element as claimed and discussed above except the first panel made from a gypsum wall board with cavities having an anhydrate material. Roberts teaches a wall panel made of 3 layers. The first layer (20) and third layers (19) are made of homogenous gypsum material. The second layer (18) is made from mineral fiberboard. The panel is sandwiched in paper layers (22,21).
- 19. At the time of the invention it would have been obvious for a person of orindary skill in the art to modify the wall assembly of Duvenhill by replacing the first panel (15) that is made of wood with the gypsum panel as taught by Roberts since gypsum will withstand fire better than the wood panel.
- 20. Duvenhill in view of Roberts does not expressly disclose the second layer of the first panel made of gypsum material having a plurality of cavities and the cavities containing an anhydrate material. Saito teaches a gypsum based material (1) with cavities (2) formed therein. At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the first panel of Duvenhill in view of Roberts by replacing the second layer with the panel taught by Saito to absorb sound better.

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21. Duvenhill in view of Roberts and Saito does not expressly disclose an anhydrate material in the cavities of the second layer of the first panel. McCormack teaches a sheet material with cavities (14) filled with an anhydrate material (16). At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the first wall panel of Duvenhill in view of Roberts and Saito by adding an anhydrate material to the cavities in the second layer as taught by McCormack to absorb and prevent the transfer of water.

- 22. Claims 30, 31, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication WO 98/03745 to Duvenhill in view of US Patent 2,248,233 to Heritage. Duvenhill discloses every element as claimed and discussed above except the surface of the first panel is non planar with a cobbled or prismatic texture. Heritage teaches a wallboard panel with a textured surface that is either wavy pattern as seen in figure 1 and 5 or in a waffle board pattern in figure 2. These patterns are given as examples and the pattern can be in any form for decorative features. At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the panel of Duvenhill by using a patterned surface as taught by Heritage for aesthetic reasons and to help prevent warping.
- 23. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication WO 98/03745 to Dúvenhill. Duvenhill discloses every element as claimed and discussed above except the distance between the first panels of the subassembly

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being 170mm. The office takes Official notice that it is well known that the greater the distance between layers in a partition or wall (i.e. greater air pocket), the transmission of sound well be lower. Therefore it would have been obvious to make the distance between the first panels of the wall of Duvenhill 170 mm or larger to help reduce sound transmission.

- 24. Claims 38, 41, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication WO 98/03745 to Duvenhill in view of US Patent 3,908,062 to Roberts in view of US Patent 4,330,589 to Saito and US Patent 5,955,187 to McCormack as applied to claims 28 and 29 above, and further in view of US Patent 6,668,504 to Hughart. Duvenhill in view of Roberts, Saito, and McCormack disclose every element as claimed and discussed above except the compressible spacer element being a resiliently flexible element. Hughart teaches a wall assembly with resilent flexible spacer elements (36) made from rubber. At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the wall assembly of Duvenhill in view of Roberts, Saito, and McCormack by replacing the compressible spacer element with the resilient flexible spacer element as taught by Hughart to help absorb sound vibrations.
- 25. Claims 39, 40, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication WO 98/03745 to Duvenhill in view of US Patent 3,908,062 to Roberts in view of US Patent 4,330,589 to Saito, US Patent 5,955,187 to

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McCormack, and US Patent 6,668,504 to Hughart as applied to claims 38, 41, 44, and 45 above, and further in view of US Patent 2,248,233 to Heritage. Duvenhill in view of Roberts, Saito, McCormack, and Hughart disclose every element as claimed and discussed above surface of the first panel is non planar with a cobbled or prismatic texture. Heritage teaches a wallboard panel with a textured surface that is either wavy pattern as seen in figure 1 and 5 or in a waffle board pattern in figure 2. These patterns are given as examples and the pattern can be in any form for decorative features. At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the first panel of the wall assembly of Duvenhill in view of Roberts, Saito, McCormack, and Hughart by using a patterned surface as taught by Heritage for aesthetic reasons and to help prevent warping.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Ayres whose telephone number is (571) 272-8299. The examiner can normally be reached on MON-THU 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TMA 6/12/06

JANET M. WILKENS
PRIMARY EXAMINER

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